[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2012-0188; Directorate Identifier 2011-NM-120-AD; Amendment 39-17079; AD 2012-11-15]

RIN 2120-AA64

**Airworthiness Directives;** BAE SYSTEMS (Operations) Limited Airplanes **AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all BAE SYSTEMS (Operations) Limited Model 4101 airplanes. This AD was prompted by reports of cracking found in the wing rear spar. This AD requires a one-time detailed inspection for cracks, corrosion, and other defects of the rear face of the wing rear spar, and repair if necessary. We are issuing this AD to detect and correct cracking in the rear spar, which could propagate to a critical length, possibly affecting the structural integrity of the area and resulting in a fuel tank rupture, with consequent damage to the airplane and possible injury to its occupants.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS

### AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone 425-227-1175; fax 425-227-1149.

#### **SUPPLEMENTARY INFORMATION:**

#### Discussion

We issued a notice of proposed rulemaking (NPRM) to amend

14 CFR part 39 to include an AD that would apply to the specified products. That

NPRM was published in the <u>Federal Register</u> on March 6, 2012 (77 FR 13228).

That NPRM proposed to correct an unsafe condition for the specified products.

The MCAI states:

Four cracks were found on a wing rear spar by an operator during a fuel leak investigation. The cracks were located between ribs 6 and 7, immediately inboard of the inboard engine rib. The cracks initiated at adjacent fastener bores in the rear spar upper boom and progressed downwards, diagonally, into the rear spar web.

Such cracking in the rear spar, if not detected and corrected, could propagate to a critical length, possibly affecting the structural integrity of the area and/or resulting in a fuel tank rupture, and consequent damage to the aeroplane and injury to its occupants.

For the reasons described above, this [EASA] AD requires a one-time [detailed] inspection [for cracks, corrosion, and other defects] of the rear face of the wing rear spar and the accomplishment of the associated corrective actions [i.e., repair], depending on findings.

You may obtain further information by examining the MCAI in the AD docket.

#### Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 13228, March 6, 2012) or on the determination of the cost to the public.

#### Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM
   (77 FR 13228, March 6, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 13228, March 6, 2012).

### **Costs of Compliance**

We estimate that this AD will affect 3 products of U.S. registry. We also estimate that it will take about 25 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$6,375, or \$2,125 per product.

We have received no definitive data that would enable us to provide a cost estimates for the on-condition actions (repairing cracks, corrosion, and defects) specified in this AD.

# **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 13228, March 6, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

**2012-11-15 BAE SYSTEMS (Operations) Limited:** Amendment 39-17079. Docket No. FAA-2012-0188; Directorate Identifier 2011-NM-120-AD.

### (a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## (b) Affected ADs

None.

# (c) Applicability

This AD applies to BAE SYSTEMS (Operations) Limited Model 4101 airplanes, certificated in any category, all models, and all serial numbers.

### (d) Subject

Air Transport Association (ATA) of America Code 57: Wings.

#### (e) Reason

This AD was prompted by reports of cracking found in the wing rear spar. We are issuing this AD to detect and correct cracking in the rear spar, which could propagate to a critical length, possibly affecting the structural integrity of the area and resulting in a fuel tank rupture, with consequent damage to the airplane and possible injury to its occupants.

### (f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

# (g) Detailed Inspection and Repair

Within 300 flight hours after the effective date of this AD, or before further flight if a fuel leak is detected in the vicinity of a wing rear spar, whichever occurs first: Do a detailed inspection for cracks, corrosion, and other defects (defects include scratches, dents, holes, damage to fastener holes, or damage to surface protection and finish) of the rear face of the wing rear spars, in accordance with the Accomplishment Instructions of BAE SYSTEMS (Operations) Limited Alert Service Bulletin J41-A57-029, dated May 6, 2011.

- (1) If any cracking, corrosion, or other defect is found to be within the criteria defined in Subject 57-00-00, Wings General, of Chapter 57, Wings, of the Jetstream Series 4100 Structural Repair Manual, Volume 1, Revision 30, dated April 15, 2007: Before further flight, repair the damage, in accordance with the repair instructions specified in Subject 57-00-00, Wings General, of Chapter 57, Wings, of the Jetstream Series 4100 Structural Repair Manual, Volume 1, Revision 30, dated April 15, 2007.
- (2) If any cracking, corrosion, or other defect is found exceeding the criteria as specified in Subject 57-00-00, Wings General, of Chapter 57, Wings, of the Jetstream Series 4100 Structural Repair Manual, Volume 1, Revision 30, dated April 15, 2007: Before further flight, repair the condition, in accordance with a

method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or EASA (or its delegated agent).

### (h) Reporting

Submit a report of the findings of the inspection required by paragraph (g) of this AD, including a report of no defects, to BAE SYSTEMS (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax+44 1292 675704; e-mail <a href="mailto:RApublications@baesystems.com">RApublications@baesystems.com</a>; Internet <a href="http://www.baesystems.com/Businesses/RegionalAircraft/index.htm">http://www.baesystems.com/Businesses/RegionalAircraft/index.htm</a>, at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD.

- (1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.
- (2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

# (i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager,
International Branch, ANM-116, Transport Airplane Directorate, FAA, has the
authority to approve AMOCs for this AD, if requested using the procedures found in
14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal
inspector or local Flight Standards District Office, as appropriate. If sending
information directly to the International Branch, send it to ATTN: Todd Thompson,

Aerospace Engineer, International Branch, ANM-116, Transport Airplane

Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356;
telephone 425-227-1175; fax 425-227-1149. Information may be e-mailed to:

9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC,
notify your appropriate principal inspector, or lacking a principal inspector, the
manager of the local flight standards district office/certificate holding district office.

The AMOC approval letter must specifically reference this AD.

- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to

the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

### (j) Related Information

Refer to MCAI EASA Airworthiness Directive 2011-0096, dated May 25, 2011, and the service information specified in paragraphs (j)(1) and (j)(2) of this AD, for related information.

- (1) BAE SYSTEMS (Operations) Limited Alert Service Bulletin J41-A57-029, dated May 6, 2011.
- (2) Subject 57-00-00, Wings General, of Chapter 57, Wings, of the Jetstream Series 4100 Structural Repair Manual, Volume 1, Revision 30, dated April 15, 2007.

# (k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise.
  - (i) BAE SYSTEMS (Operations) Limited Alert Service Bulletin J41-A57-029, dated May 6, 2011.
- (ii) Subject 57-00-00, Wings General, of Chapter 57, Wings, of the Jetstream Series 4100 Structural Repair Manual, Volume 1, Revision 30, dated April 15, 2007. The revision level and date of this document are identified only in the Record of Revisions section of this document.

(3) For service information identified in this AD, contact BAE SYSTEMS (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail <a href="mailto:RApublications@baesystems.com">RApublications@baesystems.com</a>; Internet <a href="http://www.baesystems.com/Businesses/RegionalAircraft/index.htm">http://www.baesystems.com/Businesses/RegionalAircraft/index.htm</a>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to <a href="http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html">http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html</a>. Issued in Renton, Washington, on March 31, 2012.

Michael Kaszycki, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

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